

CURRENT LITERATURE.

MINOR NOTICES.

MR. EDO CLAASSEN of Cleveland has published in the fifth annual report of the Ohio Academy of Science a list of the Uredineæ of Cuyahoga and other counties of northern Ohio, together with the names of their hosts. The list includes forty-three species. Also, a second list of the Erysipheæ of the same region, including eighteen species.—C. R. B.

A PAPER by Professor Conway MacMillan in the *Journal of School Geography* for April contains some interesting "Notes for teachers on the geographical distribution of plants," in which the chief principles of ecologic plant geography are sketched, and the suggestion made that such a study of plants has more value in secondary schools than the ordinary herbalism.—C. R. B.

DR. ALBERT SCHNEIDER has published in the *Journal of Pharmacology* for June an account of the histology of the leaves of six species of *Philocarpus* which furnish the various sorts of jaborandi, and also of *Swartzia decipiens* which appears as a substitute. Each species is illustrated by three figures showing the cross section and the upper and lower epidermis.—C. R. B.

A SYNOPSIS of the mosses collected by Dr. Julius Röhl in the United States in 1888 has been published by him¹ and distributed by him as a separate. A running account of his trip is followed by a list of species collected. The erratic multiplication of species by Kindberg after competent bryologists have once worked over the material seems to meet Röhl's approval, as he gives these names preference.—C. R. B.

THE SEMI-ANNUAL REPORT of Schimmel & Co., dated April 1897, contains a revised list of essential oils, giving their botanical origin, the part or products of the plant from which the oil is obtained, the yield, and the physical constants and principal chemical constituents of each oil. Their first list was published in October 1893. The present one contains a considerable number of oils recently introduced into commerce and the industries. The report is also accompanied by a map showing the regions of Japan producing peppermint oil and camphor.—C. R. B.

¹ Abhandl. d. Naturw. Vereins zu Bremen 14: 183-216. 1897.

MR. JAMES M. MACOUN'S "List of plants known to occur on the coast and in the interior of the Labrador peninsula" includes only spermatophytes and pteridophytes. We hope that ere long botanists will use a less comprehensive term than "plants" when they mean to omit half the subkingdoms from consideration. The list is reprinted from the eighth volume of annual reports of the Geological Survey of Canada.—C. R. B.

THOSE WHO wish to make exchanges in cryptogams or purchase them will do well to consider the terms and inspect the list of the Vienna Bureau of Exchange managed by J. Brunnthaler (Igelgasse 11, Wien IV, 2). The list for 1897 contains over 3000 species. A most reprehensible practice is the publication of diagnoses of new species in a department entitled "Wissenschaftliche Notizen." Thirteen new species of fungi are included in this year's issue, with no indication that they have been described elsewhere. We hope Herr Brunnthaler will prohibit this in future.—C. R. B.

IN ADVANCE of the eighth Annual Report of the Missouri Botanical Garden, we have the first of the scientific papers, an enumeration by M. Jules Cardot of the mosses of the Azores and Madeira, based upon the list of Mitten (1870) and the collections of Trelease and others in 1894-5-6. Eighty Bryales and eight Sphagnales are now known from the Azores, of which nine are new. These are characterized, and figured on eleven plates photo-engraved from the author's drawings. Nineteen Bryales are listed from Madeira, collected by Trelease in June 1896, of which one is new.—C. R. B.

THE EXTRAORDINARY development of the water hyacinth (*Piaropus crassipes* Britt. or *Eichhornia crassipes* Solms) in the St. Johns river, Florida, interferes so seriously with navigation that bills have been introduced in Congress to provide for its eradication. Information on the subject of its introduction, present distribution, and effects on navigation have been gathered by Mr. H. J. Webber under the direction of the Department of Agriculture and is embodied in a bulletin (no. 13) of the Division of Botany. Fortunately the plant is confined to the river named, its tributaries, and a few inland lakes and ponds, but it is a real menace to boats, even to the largest steamers, in the river south of Palatka.—C. R. B.

THE DAHLIA has for many an interest almost as great as the chrysanthemum. Florists who are growing it will be especially interested in a little book which has just been published as one of the series known as Dobbie's Horticultural Handbook.² In it will be found chapters on the history of the dahlia, by Richard Dean, F.R.H.S.; the botany of the dahlia, by John Ballantyne; its propagation and exhibition, by Stephen Jones; its cultivation, by

²The dahlia; its history and cultivation. 12mo. pp 81, pl. 9. *fig. 1*. London and New York: The Macmillan Co., 1897. 75 cents.

Robert Fife, F.R.H.S.; together with a very complete list of varieties grown in 1896 and prognostications as to its future, by William Cuthbertson. Although written with English conditions in mind there will be information of value to American cultivators.—C. R. B.

BOTANISTS frequently find in literature reagents and reactions referred to by the names of their authors, and they are often at a loss to know what is meant. For such, a key is afforded by a recent reprint from the *Pharmaceutical Review*.³ Mr. Richard Fischer has translated Altschul's list of reagents and reactions, about 600 in number, arranged alphabetically under their authors' names, and followed by an index of subjects. The list contains a considerable number of physiological reagents and some of the more important bacteriological ones. Numerous cross references make consultation easy. The repaging of the pamphlet, an annoyance necessitated by the form of the journal from which it is reprinted, might have been partially counteracted somewhat by an indication in the margin of original pagination.—C. R. B.

A BACTERIAL DISEASE of the common squash-bug (*Anasa tristis*) has been studied by B. M. Duggar⁴ at the Illinois State Laboratory. It is readily communicated to chinch-bugs, and is the first genuine bacterial disease of hemipterous insects known. The *Bacillus insectorum* of Burrill, formerly classed as such, has been found to be a normal inhabitant of the cœcal appendages of many insects, and not pathogenic. The germ stains more deeply at the poles, but produces no spores. The growth on agar agar when added to water makes an infusion that is highly toxic to all classes of insects, killing them after a few minutes immersion. On account of this property the germ has been named *Bacillus entomotoxicon*. Mr. Duggar gave some account of this work at the Buffalo meeting of the American Association, an abstract of which will be found in this journal.⁵—J. C. A.

MR. A. J. McCLATCHIE has printed in the *Proceedings of the Southern California Academy of Science*⁶ a list of the seedless plants known to occur in the coast region of southern California. The catalogue is preceded by a synopsis of the vegetable kingdom, in which are to be found some novelties in the way of classification, as also in the list itself. One thousand and

³FISCHER, RICHARD: Reagents and reactions known by the names of their authors. Based on the original collection by A. Schneider; revised and enlarged by Dr. Julius Altschul for the Pharmaceutische Centralhalle. Translated from the German. 8vo., pp. 82. Reprinted from *Pharmaceutical Review*, 1896, 1897. Milwaukee: Pharm. Rev. Pub. Co. 50 cents.

⁴DUGGAR, B. M.—On a bacterial disease of the squash-bug. *Bull. Ill. Lab. Nat. Hist.* 4: 340-379. pl. 27-28. 1896.

⁵BOT. GAZ. 22: 236. 1896.

⁶McCLATCHIE, A. J.: Seedless plants of southern California. *Protophytes-Pteridophytes*. *Proc. S. Cal. Acad. Sci.* 1: 337-398. 5 Je. 1897. 50 cents.

thirty-three species are enumerated, to which further search will doubtless add many. Among the Agaricaceæ the following new species are described: *Coprinus sulcatus*, *C. sulphureus*, *Hypholoma flocculentum*, *Agaricus bulbosus*, *Pluteolus californicus*, *Pluteus magnus*, *P. californicus*. Artificial keys to the genera of each order are given, which will doubtless greatly increase the usefulness of the list to collectors in this region. We must again express the conviction that such a catalogue is not the place for the publication of new species, nor for the promulgation of new schemes of classification.—C. R. B.

PROFESSOR WARBURG'S new book on the nutmeg⁷ is the result of eight years of study and travel. Already a recognized authority on the Myristicaceæ, and with several years of travel and experience in the land of the nutmeg, it is highly fitting that the author should have undertaken a more general work, appealing not alone to botanists, but to all interested in the history, culture, trade, and commercial value of the myristicas. It was Dr. Warburg who first introduced to science the well-known "long nutmeg" of culture (*M. argentea* Warb.), though for many years it had been familiar to commerce as second only in importance to *M. fragans*. It had long been confused by botanists with *M. fatua*, a species of no particular commercial value, and curiously enough this confusion was not finally cleared up until Dr. Warburg found the plant less than ten years ago in New Guinea and gave an exact diagnosis of the species. Interesting and curious bits of historical and traditional information abound throughout the book. Accounts of the discovery of the Banda Islands, the home of the nutmeg, the gradual spread of its culture from the Indian Archipelago over the tropical world, descriptions of the principal nutmegs of commerce, detailed methods of culture, exhaustive compendium of trade statistics, economic products, etc., constitute the general content of the book. The reviewer is at once impressed with the completeness of the work, and the general scientific style and arrangement. Too many so-called monographs of culture plants have in the past been fragmentary, often compilations of similar worthless publications, constituting a hapless mixture of true and false, conjecture finding place indiscriminately with the well established all thrown together without reference or citation.—E. B. ULINE.

NOTES FOR STUDENTS.

A REPORT on the forests of Western Australia⁸ by J. Ednie-Brown, F. L. S., conservator of forests, issued as a government publication, contains a large amount of interesting information about Australian trees. The illustra-

⁷ WARBURG, O.: Die Muscatnuss, ihre Geschichte, Botanik, Kultur, Handel und Verwerthung.—Roy. 8vo. 40 Bogen, 3 Heliograv., 4 Lithogr., 1 Kart., 12 Textabbild. Leipzig: Wilhelm Engelmann. M 20.

⁸ BROWN, J. EDNIE.—Report on the forests of western Australia, their descrip-